

CLAIMS

What is claimed is:

1. A system for franking machine communication, comprising:

a franking machine;

at least one peripheral device; and

a bus system comprising

a network controller adapted to be electrically coupled to each peripheral device and the franking machine, and adapted to permit data communications between each peripheral device and the franking machine, and between each peripheral device;

a host device associated with the network controller of the franking machine, the host device adapted to detect and identify each peripheral device and configure the franking machine based on a state of each peripheral device; and

a bus adapted to be electrically connected to each network controller for transferring data signals between the franking machine and each peripheral device, and between each peripheral device.

2. The system of claim 1, wherein the bus system further comprises a two wire terminated bus.

3. The system of claim 1, wherein the peripheral devices have broadcast data transmission capability.

4. The system of claim 1, further including a communications system included on the network controller of each of the peripheral devices and the franking machine, wherein the communications system associated with the franking machine includes the host device.

5. The system of claim 1, wherein the peripheral devices include letter handling peripheral devices.

6. The system of claim 1, wherein the data signals transmitted by each of the peripheral devices include sensor data signals indicating an operating state of each of the peripheral devices.

7. The system of claim 1, wherein the peripheral devices are a feeder, a front guide or a stacker.

8. The system of claim 1, wherein the peripheral devices are a static weighing scale, a stand for a static scale, an addressing module, or a dynamic scale.

9. The system of claim 1, wherein the bus system is adapted to be expandable, modular and open for addition or removal of peripheral devices.

10. The system of claim 1, wherein the peripheral devices are connected directly to the bus system for minimizing a footprint of the franking machine and the associated peripheral devices.

11. The system of claim 1, wherein the bus is a wireless bus for wireless communication between the franking machine and each peripheral device, and between each peripheral device.

12. The system of claim 1, wherein the network controller permits data signal communications directly between each the peripheral devices without processing of the data signals by the host device.

13. A method for communication with peripheral devices of a franking machine, comprising the steps of:

providing a bus system integrated with the franking machine adapted to allow the franking machine to communicate with each of the peripheral devices by sending and receiving data signals via the bus system, wherein each of the peripheral devices and the franking machine include a network controller for communicating via the bus system;

coordinating an operation of the peripheral devices by connecting a host device associated with the network controller of the franking machine to the bus system for:

automatically detecting the peripheral devices connected to the franking system for determining a configuration of the franking system;

determining an operating state for each of the peripheral devices by transmitting a first data signal to the peripheral devices, and receiving and analyzing a second data signal from each of the peripheral devices; and

permitting data signal communications directly between each of the peripheral devices.

14. The method of claim 13, wherein the step of coordinating the operation of the peripheral devices further includes the host device broadcasting the command data signal to all of the peripheral devices.

15. The method of claim 13, wherein in the step of automatically detecting the peripheral devices coupled to the franking system, the step includes automatically receiving an identification data signal from each of the peripheral devices connected to the bus system.

16. The method of claim 15, wherein in the step of automatically detecting the peripheral devices connected to the franking system, the step further includes distinguishing between each identification data signal from each of the peripheral devices even if two or more of the peripheral devices have the same identification

data signal, for determining which of the peripheral devices output a data signal to the bus system.

17. The method of claim 16, wherein the step of automatically detecting the peripheral devices connected to the franking system further includes the step of each peripheral device transmitting a unique serial number signal for uniquely identifying each peripheral device.

18. The method of claim 13, further including the steps of:

automatically detecting a disconnection of each of the peripheral devices from the bus system; and

reconfiguring the franking system based on the peripheral devices in communication with the franking system.

19. The method of claim 13, further including steps of receiving a status data signal from each of the peripheral devices for indicating a change in the operation of the peripheral devices, wherein the transmitting and receiving of the status data signals can be processed without requiring use of a main processor of the franking machine.

20. The method of claim 13, further including the step of establishing a test state for each of the peripheral devices which permits access to sensors and actors of

each of the peripheral devices for testing of each peripheral device.

21. The method of claim 13, wherein in the step of providing the bus system integrated with the franking machine, the peripheral devices are letter handling devices.

22. The method of claim 13, wherein in the step of transmitting and receiving the data signals directly between each of the peripheral devices the data signals are not processed by the host device.

23. The method of claim 13, wherein the step of coordinating an operation of the peripheral devices by connecting a host device associated with the network controller of the franking machine to the bus system further includes the step of associating a communications system on the network controller of each of the peripheral devices and the franking machine, wherein the communications system associated with the franking machine includes the host device.

24. A system for communication between a plurality of peripheral devices, comprising:

at least one peripheral device;

a bus system adapted to be connected to each peripheral device and allow data signals to be transmitted between each of the peripheral devices, comprising

a network controller for each of the peripheral devices, each network controller integrated with one of the peripheral devices for transmitting and receiving data signals; and

wherein the network controller associated with at least one of the peripheral devices transmits data signals to each of the other peripheral devices connected to the bus system, and the network controller is adapted to determine a state of each of the peripheral devices and a configuration of the peripheral devices.

25. The system of claim 24, further including a communications system associated with each network controller, wherein the communications system for at least one of the peripheral devices is adapted to automatically detect and identify the peripheral devices connected to the bus system by requesting and receiving an identification data signal transmitted by each of the peripheral devices.

26. The system of claim 24, wherein the bus system provides a standard configuration for connecting the peripheral devices to the bus system.

27. A system for franking machine communication, comprising:

a franking machine;

at least one peripheral device; and

a bus system for connecting peripheral devices to a franking machine, wherein the bus system is adapted to provide franking machine security by periodically detecting each peripheral device attached to the franking machine, the bus system comprising

a network controller integrated with each peripheral device and the franking machine, and adapted to permit data communications between each peripheral device and the franking machine, and between each peripheral device;

a host device integrated with the network controller of the franking machine, and adapted to detect and identify each peripheral device and configure the franking machine based on a state of each peripheral device; and

a bus adapted to be electrically connected to each network controller for transferring data signals between the franking machine and each peripheral device, and between each peripheral device.

28. The system of claim 27, wherein the host device determines an occurrence of an error condition if the

peripheral device is detached from the franking machine configuration.

29. The system of claim 27, further including a communications system included on the network controller of each of the peripheral devices and the franking machine, wherein the communications system associated with the franking machine includes the host device.

30. The system of claim 27, wherein the bus system allows the connection of additional peripheral devices without hardware changes to the franking machine.